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THE POWER COMPANIES TRYING TO DEFEAT THE PLAIN PURPOSE OF THE BURTON BILL BY BRINGING IN ENORMOUS QUANTITIES OF POWER FROM CANADA

A prompt appeal to the Secretary of War necessary to carry out the will of the people, which, as expressed by President Roosevelt, is that "Nothing should be allowed to interfere with the preservation of Niagara Falls in all their beauty and majesty."

Canadian Niagara Danger

The hearing to take place before Secretary Taft, November 20, 1906, at Washington, is to decide as to what quantities of electrical power, generated from the water of Niagara river, shall be admitted into the United States from Canada. The Burton bill provides that not exceeding 160,000 horse-power may be admitted, within the discretion of the Secretary of War, and that he may within six months also issue permits for the admission of additional power from Canada to an extent which, in connection with that produced on the Canadian side, will not exceed a total of 350,000 horse-power. It is also expressly provided that these figures are not to be construed as a direction to admit the power, but merely as limitations. The Secretary controls it all, under the law, and can shut it all out.

Canadian power companies propose to develop a total of about 425,000 horse-power, and it might be thought that if this power is not sold in the United States it would be sold in Canada, so that it would make little difference to the Falls whether the power were used in Canada or in the United States.

The Hydro-Electric Commission of the Province of Ontario reported recently that if all the industries within electric radius of Niagara, in Canada, were to discard their engines and use electricity, a total of less than 50,000 horse-power might be used. At present, not half this amount is being developed and used by Canadian industries. Barely ten per cent of the vast amount of power proposed to be developed in Canada can be used within five years in that country, and, if the power is not transmitted to the United States, it will not be developed, and the Falls will not be depleted. Thus the United States does have power in Canada in respect to Niagara-made electricity. If Secretary Taft refuses admission to the electric power generated in Canada, the water which would have generated it will continue, instead, to fall in majesty over the great cataract.

A Tremendous Depletion of Niagara Proposed

The power-developing companies are always very anxious to convey the impression that the amount of water they want to take from the Niagara river will not interfere with the beauty of the Falls. A recent examination of the tail-races and channels intended to return the water to the Niagara river after it has been used in the great turbine wheels of the existing Canadian power plants, shows that their aggregate section is 68 x 72 feet. The velocity of the water now beginning to rush through these vast channels is at least five times that of a rapidly flowing river. Is it likely that the volume of water which will pass at Niagara speed, through a channel as wide as a city boulevard, and as deep as a six-story office building, will not make any difference in the volume of the Falls?

Another computation shows that the water it is proposed to abstract on the Canadian side alone would make a rapidly flowing river 1,685 feet wide and 18 feet deep. It is said that this will have no appreciable effect on the scenic grandeur of Niagara Falls, and this notwithstanding the sober finding of the American members of the International Waterways Commission that "the glory of Niagara Falls lies in its volume of water rather than its height or in the surrounding scenery." Will the withdrawal of a deep river, nearly a third of a mile wide, at Niagara speed, make no difference?

A careful comparison has been made of the effect of the

withdrawal of the water above Niagara Falls for which engagements have already been entered into, under temporary permits issued by the Secretary of War. The volume of water thus withdrawn will more than equal the present average outflow at their mouths of the Hudson, Delaware and James rivers combined. Even if no further permits are granted, this amount will inevitably be increased by the additional water required for the Chicago Drainage Canal and the Welland Canal. Will any one suggest that the withdrawal of enough water to equal that passed into the ocean by the three great rivers named cannot be noticed at Niagara? Of course, if the Canadians continue to narrow the Horseshoe Fall—they have already cut off 500 feet of it to accommodate a power company!—the difference will not be quite so noticeable.

Considering strictly the diversions already authorized on the American side, the amount likely to be used in Canada, and that which would be required for the 160,000 horse-power which Secretary Taft has been asked to admit, the total amount of water to be withdrawn for power and sanitary purposes would exceed 38,000 cubic feet per second. If this should be considered as possessing an average velocity of eight feet per second, which is the lowest estimate placed upon Niagara speed near the shore, and not in the center of the rapids, the volume of water thus to be withdrawn would equal the combined outflow at their mouths of the Susquehanna, Potomac, Hudson, Delaware and James rivers. Is it less than absurd to suggest that the withdrawal of so vast an amount of water would not have an appreciable effect upon the Falls?

The engineers who insist that no damage will be done to the Falls, and those who bring the oldest inhabitant at Niagara to testify that he cannot see any difference, have also insisted that the American Fall has an average depth of four feet. Colonel Ernst has said "They do not know; there is no way to find out. Some parts of it I know are not over a foot deep." Unprejudiced engineers attached to the two great reservations at Niagara have reported that this average depth of water over the American Fall is less than two feet.

Who Benefits by Niagara Power?

Much has been said about the benefits of cheap power at Niagara, but little has been said as to who is to get these benefits. A collateral instance may well be cited. It is an abstract from a paper by Mr. J. W. Lyon, Secretary of the Western Ontario Municipal Niagara Power Union, delivered at Toronto, August 29, 1906. He takes into comparison the recently completed destruction of the beautiful Falls of Montmorency, near Montreal, and tells us what may be expected.

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